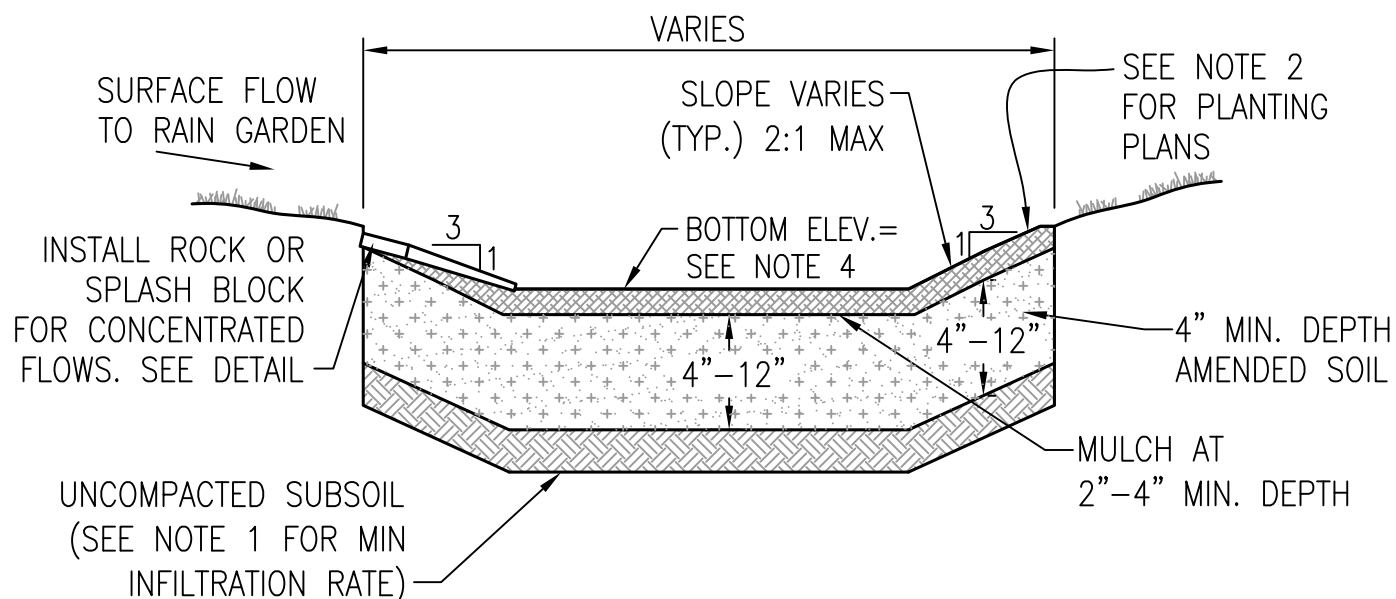


SEE NOTES FOR RAIN GARDEN REQUIREMENTS

PLAN VIEW



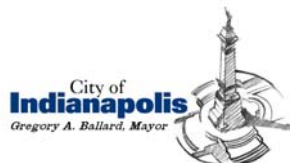
SECTION A-A

N.T.S.

SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS

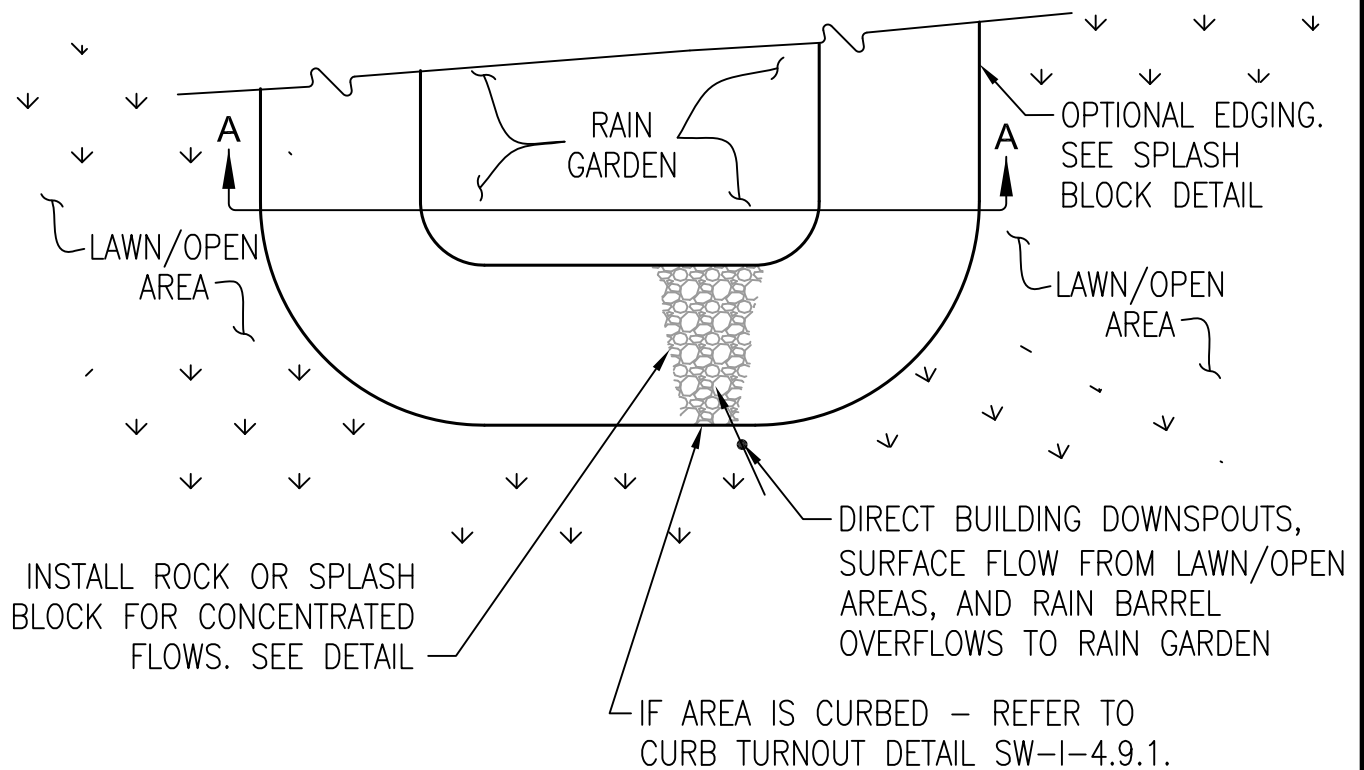


RAIN GARDEN
SMALL SCALE
TYPICALLY ≤ 300 SQ. FT.



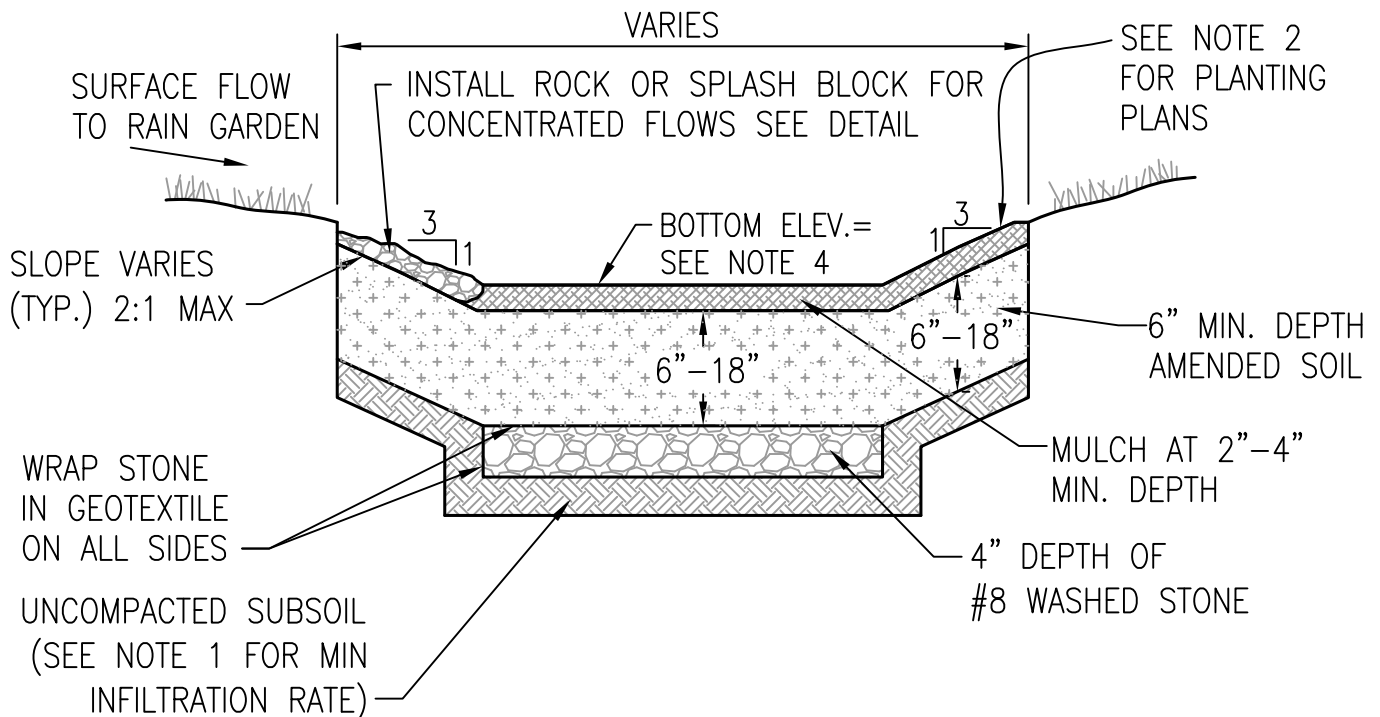
NUMBER
SW-MS-4.5.3a

REVISED MARCH 23, 2010



SEE NOTES FOR RAIN GARDEN REQUIREMENTS

PLAN VIEW



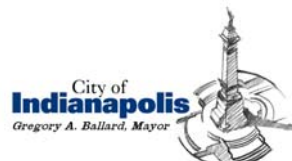
SECTION A-A

N.T.S.

SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS

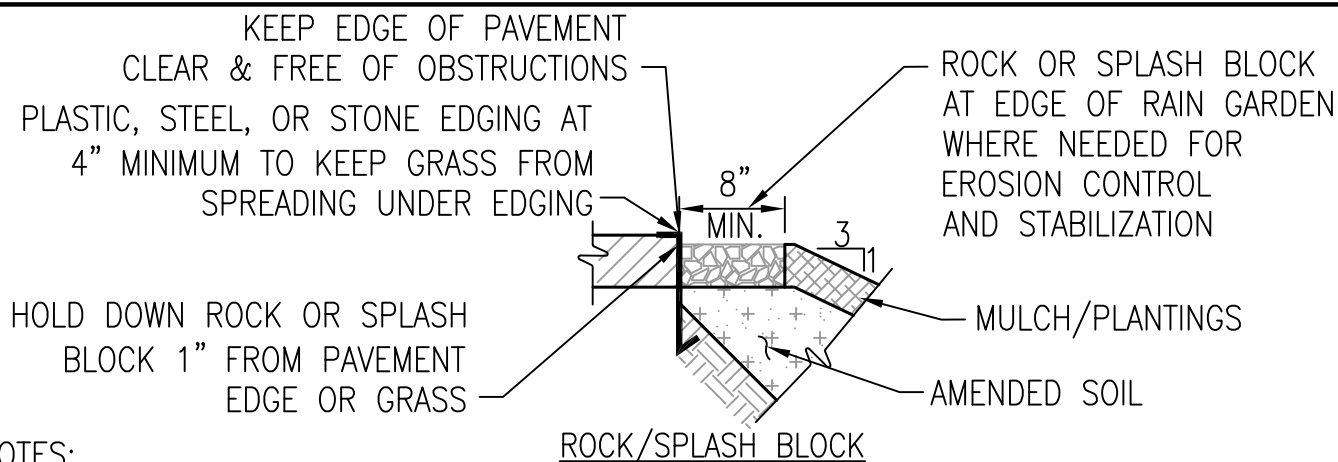


RAIN GARDEN
WITH DRAINAGE STONE
SMALL SCALE
TYPICALLY \leq 300 SQ. FT.



NUMBER
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REVISED MARCH 23, 2010



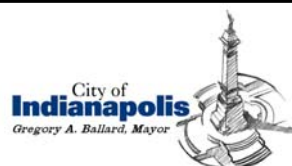
NOTES:

- 1) PERFORM SOIL TEST TO DETERMINE APPROPRIATE SOIL AMENDMENTS. REFER TO RAIN GARDEN MATERIAL LIST FOR SOIL AMENDMENTS.
- 2) SEE EXAMPLE PLANTING PLANS FOR PLANT TYPES & QUANTITY FOR RAIN GARDEN. REFER TO RAIN GARDEN MATERIAL LIST FOR PLANTS.
- 3) RAIN GARDEN SIZE TO BE DETERMINED BASED ON SQUARE FOOTAGE OF IMPERVIOUS SURFACE DRAINING TO RAIN GARDEN. REFER TO RAIN GARDEN SIZING CALCULATOR.
- 4) TYPICAL STORAGE DEPTH FOR SMALL SCALE RAIN GARDEN = 4" TO 12". PLANTINGS SHOULD BE LOCATED BY FLOW DEPTH ACCORDING TO THEIR WATER TOLERANCE. REFER TO EXAMPLE PLANTING PLANS. WATER SHOULD NOT REMAIN IN RAIN GARDEN LONGER THAN 48 HOURS.
- 5) SOIL PLANTING DEPTH TO BE INCREASED IF TREES WILL BE PLANTED IN RAIN GARDEN. USE OF TREES IS DISCOURAGED IN AREAS NEAR UNDERDRAINS OR STORM UTILITY LINES.
- 6) RAIN GARDENS SHALL NOT BE INSTALLED OVER SEPTIC TANKS.
- 7) FOR OPERATION AND MAINTENANCE GUIDANCE REFER TO CITY OF INDIANAPOLIS SMALL SCALE OPERATION AND MAINTENANCE MANUAL.
- 8) FOR EROSION AND SEDIMENT CONTROL GUIDANCE REFER TO CITY OF INDIANAPOLIS SMALL SCALE EROSION AND SEDIMENT CONTROL MANUAL.
- 9) FOR REGISTRATION INFORMATION, REFER TO THE CITY OF INDIANAPOLIS RAIN GARDEN REGISTRATION FORM. THE CITY RECOMMENDS REGISTERING YOUR RAIN GARDEN.
- 10) IF PROPERLY MAINTAINED, RAIN GARDENS ARE NOT HIGH WEED/GRASS VIOLATIONS PER CHAPTER 575 ENVIRONMENTAL PUBLIC NUISANCES.
- 11) RAIN GARDEN SHALL BE PLACED A MINIMUM OF 10 FEET FROM THE FOUNDATION OF ANY PERMANENT STRUCTURE.
- 12) CALL 811 TO CHECK FOR UNDERGROUND UTILITIES BEFORE SOIL IS DISTURBED FOR INSTALLATION.
- 13) REFER TO PERMIT GUIDANCE. SEE RAIN GARDEN DECISION TREE.
- 14) IF A CURB CUT IS PERFORMED, UTILIZE THE CURB TURNOUT DETAIL SW-I-4.9.1.
- 15) TYPICAL SURFACE AREA BETWEEN 50-300 SQUARE FEET.
- 16) WHEN SNOW REMOVAL IS PERFORMED, SNOW SHALL BE PLOWED AROUND CURB CUTS. N.T.S.

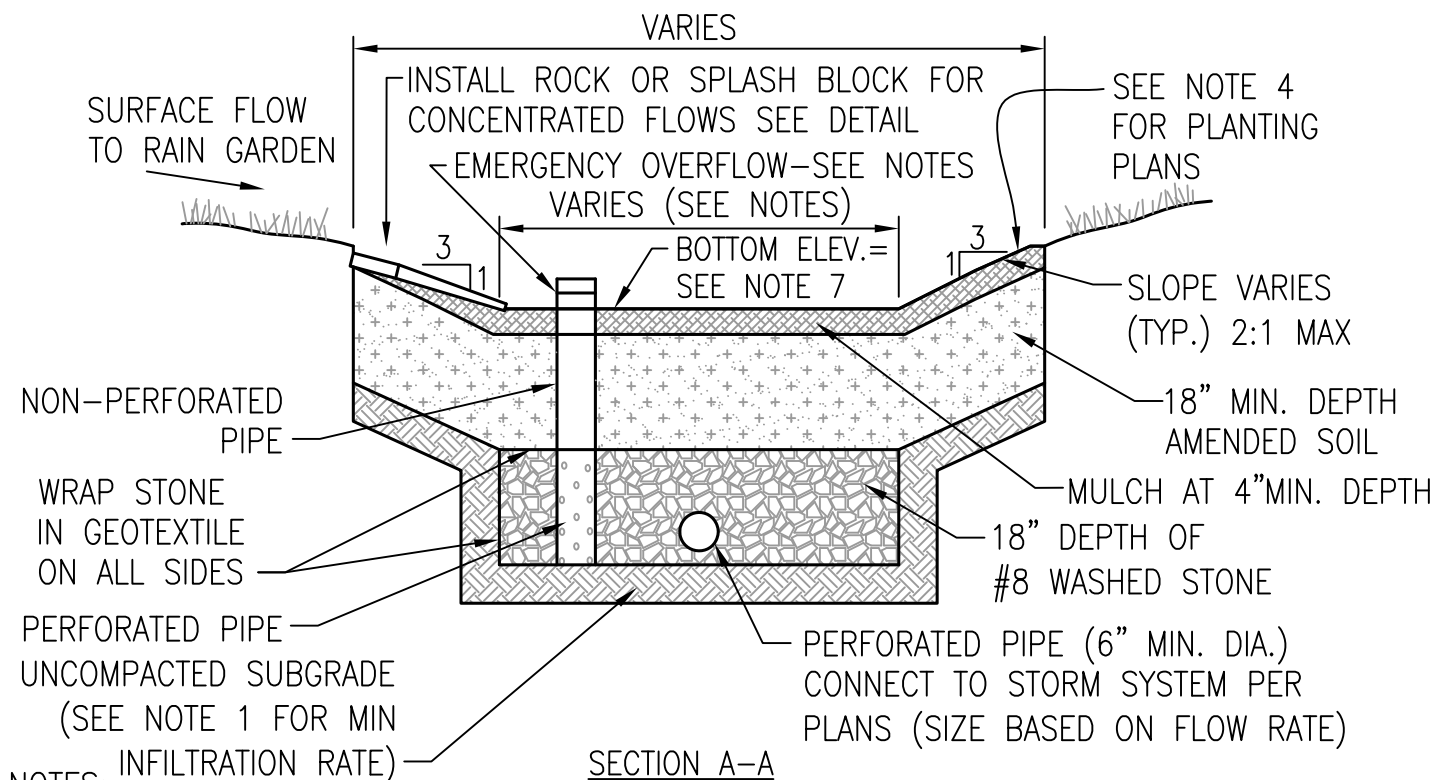
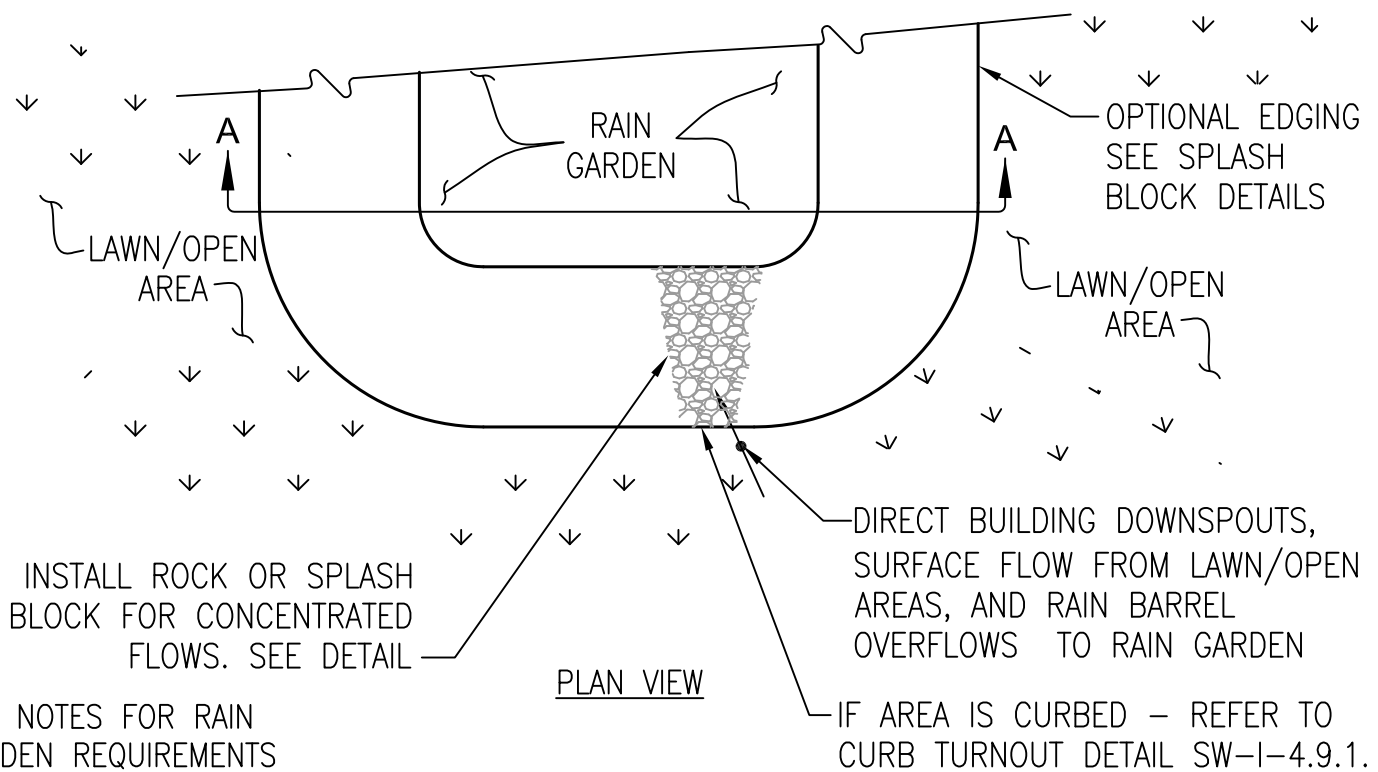
SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS



RAIN GARDEN NOTES
SMALL SCALE
TYPICALLY \leq 300 SQ. FT.



NUMBER
SW-MS-4.5.3a

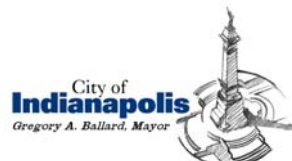


NOTES:
DESIGNER TO SHOW DETAIL OF PIPE CONNECTIONS TO PROPOSED/EXISTING STORM SYSTEM. N.T.S.

SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS

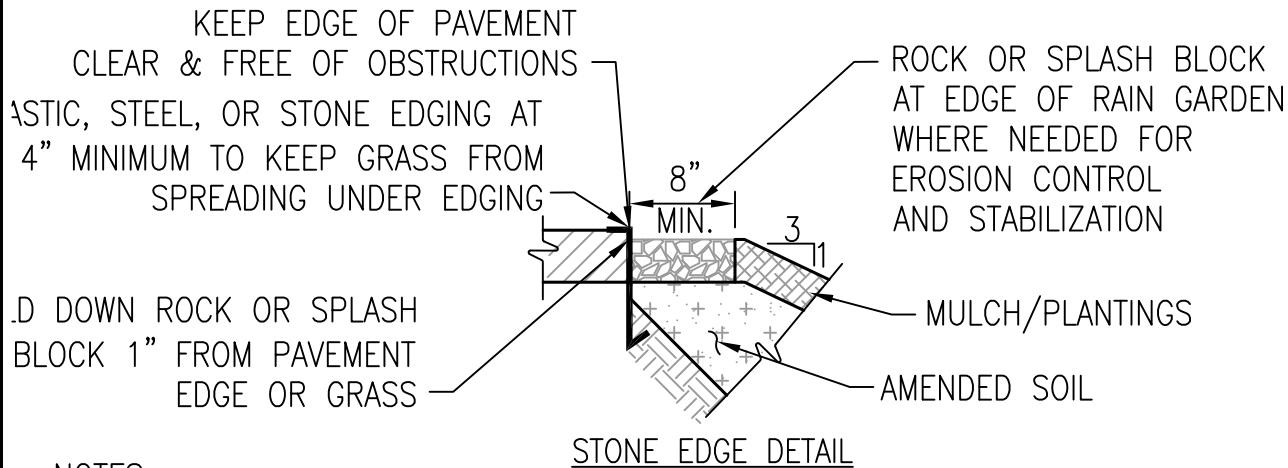


RAIN GARDEN
WITH OVERFLOW PIPE
MEDIUM TO LARGE SCALE
TYPICALLY > 300 SQ. FT.



NUMBER
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NOTES:

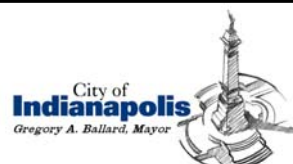
1. SEE OPERATIONS & MAINTENANCE MANUAL FOR SOIL SPECIFICATIONS. ON-SITE INSPECTION OR WRITTEN DOCUMENTATION OF THE INSTALLED SOIL SPECIFICATION IS REQUIRED.
2. WHERE POROUS PAVEMENTS ARE USED NEAR RAIN GARDENS, PROTECT STONE BASE UNDER PAVEMENT WITH GEOTEXTILE FABRIC TO PREVENT SOIL MOVEMENT INTO POROUS PAVEMENT BASE. SEE PERMEABLE PAVEMENT DETAIL.
3. WHERE NON-POROUS PAVEMENTS ARE USED NEAR RAIN GARDENS, PROTECT PAVEMENT BASE WITH IMPERVIOUS LINER TO MINIMIZE WATER MIGRATION UNDER PAVEMENT.
4. SEE EXAMPLE PLANTING PLANS FOR PLANT TYPES & QUANTITY FOR RAIN GARDEN.
5. RAIN GARDEN SIZE TO BE DETERMINED BY CIVIL ENGINEER. SIZE SHALL BE BASED ON VOLUME NEEDED FOR STORAGE OF WATER QUALITY TREATMENT AND IF NECESSARY DETENTION.
6. PROVISIONS SHALL BE MADE FOR RAIN GARDEN OVERFLOW DURING LARGE STORM EVENTS. AN OVERFLOW WEIR OR STORMWATER INLET MAY BE REQUIRED, ON A CASE-BY-CASE BASIS, DEPENDING ON FLOW VOLUME AND SITE CONDITIONS. SIZE SHOULD BE DETERMINED BY 10 YEAR STORM WITH OVERFLOW AWAY FROM BUILDING.
7. TYPICAL STORAGE DEPTH FOR RAIN GARDEN = 18". PLANTINGS SHOULD BE LOCATED BY FLOW DEPTH ACCORDING TO THEIR WATER TOLERANCE. REFER TO EXAMPLE PLANTING PLANS. WATER SHOULD NOT REMAIN IN RAIN GARDEN LONGER THAN 48 HRS.
8. SOIL PLANTING DEPTH TO BE INCREASED IF TREES WILL BE PLANTED IN RAIN GARDEN. USE OF TREES IS DISCOURAGED IN AREAS NEAR UNDERDRAINS OR STORM UTILITY LINES.

N.T.S.

SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS



RAIN GARDEN NOTES
MEDIUM TO LARGE SCALE
 TYPICALLY > 300 SQ. FT.



NUMBER
SW-MS-4.5.3b

REVISED MARCH 23, 2010

NOTES CONT'D:

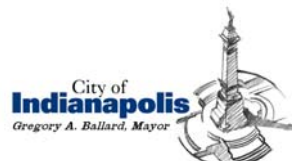
9. RAIN GARDENS SHALL NOT BE INSTALLED OVER SEPTIC TANKS.
10. REFER TO PERMIT GUIDANCE. SEE RAIN GARDEN DECISION TREE.
11. IF A CURB CUT IS PERFORMED, UTILIZE THE CURB TURNOUT DETAIL SW-I-4.9.1.
WHEN SNOW REMOVAL IS PERFORMED, SNOW SHALL BE PLOWED AROUND CURB CUTS.
12. IF RAIN GARDEN IS ADJACENT TO A STRUCTURE, THE TOP OF THE RAIN GARDEN
SHOULD BE BELOW THE LOWEST FLOOR OR BASEMENT STRUCTURE. IF NOT, AN
IMPERMEABLE LINER SHOULD BE CONSIDERED.

N.T.S.

SUSTAINABLE INFRASTRUCTURE INITIATIVE TYPICAL DETAILS



RAIN GARDEN NOTES
MEDIUM TO LARGE SCALE
TYPICALLY > 300 SQ. FT.



NUMBER
SW-MS-4.5.3b

REVISED MARCH 23, 2010